

**Arguments/Remarks**

The status of the claims is: Claims 3, 5-16, 18-21, 25-27, 29-36 and 43 are currently pending. Claims 18 and 43 are currently amended. Claims 1-2, 4, 17, 22-24, 28 and 37-42 are canceled.

The Examiner has rejected Claims 16 and 18 under 35 U.S.C. § 112 second paragraph since they depend from previously canceled claims.

Applicant has now amended claims 16 and 18 so that they are each dependent from current claim 43, and accordingly it is requested that this rejection be withdrawn.

Claims 3, 5-16, and 18-21, 29, 35, and 43 have been rejected under 35 U.S.C. § 103(a) over *Stoppini et al.* in view of *Minchinton*. This rejection is respectfully traversed. Applicant's independent claim 43 (from which each of the additional claims rejected hereunder depend either directly or indirectly) has been amended to more clearly set forth that that nutrient medium directing structure is a passive device consisting of an island within the nutrient medium chamber. The Examiner recognizes that the *Stoppini et al.* reference has no teaching of the use of such a nutrient medium directing structure or of any advantage provided by the use of such a structure. The deficiencies of *Stoppini et al.* in this regard are not remedied by the reference to *Minchinton*. First of all, *Minchinton* is not directed to nor does it suggest the use of an exposure device in which there is a flow of nutrient medium from a nutrient medium inlet through a nutrient medium chamber and out of a nutrient medium outlet. The *Minchinton* device employs

a non-flowing liquid growth medium which is confined within the device. Accordingly the *Minchinton* reference is not a disclosure which one skilled in the art would look to for a solution as to how to direct a flowing nutrient medium to surrounding culture chambers. *Minchinton* discloses a relatively complex and expensive stirrer employing a magnetic type stir bar to agitate the liquid growth medium (not to direct its flow) which is otherwise statically contained within the *Minchinton* device. The *Minchinton* structure is therefore not analogous to the structure or function of the embodiments of Applicant's invention, and even if its disclosure were available to one skilled in the art, it would direct that person away from Applicant's solution of the use of a passive nutrient medium directing structure.

Applicant has provided a novel nutrient medium directing structure which is passive in nature and consists of an island projecting from Applicant's base portion and located centrally within Applicant's nutrient medium chamber. There is no need for a magnetic stirrer or any other active device in Applicant's embodiments to agitate the fluid flowing therethrough.

Applicant's passive solution to directing nutrient medium flow is simple, inexpensive and essentially foolproof as compared to the relatively complex, expensive and subject to breakdown magnetic stirrer of *Minchinton*, which is actually deployed for a different purpose (agitation, not directing flow) than the purpose for Applicant's passive device.

Accordingly it is submitted that Applicant's independent claim 43 and dependent claims 3, 5-16, and 18-21, 29 and 35 patentably distinguish over the combination of *Stoppini et al.* and *Minchinton*.

Claims 30-34 have been rejected under 35 U.S.C. § 103(a) over the combination of *Stoppini et al* and *Minchinton* and further in view of *Aufderheide et al*. Claims 30-34 are also directly or indirectly dependent from claim 43 and are patentable for the reasons set forth above. The *Aufderheide et al*. reference does not cure the deficiencies of *Stoppini et al.* and *Minchinton* as references as discussed above, and it is requested that this rejection be withdrawn.

Claims 25-27 and 36 have been rejected under 35 U.S.C. § 103(a) over the combination of *Stoppini et al.* and *Minchinton* and further in view of *Gruenberg*. Claims 25-27 and 36 are all directly or indirectly dependent from independent claim 43 and are therefore patentable over the combination of *Stoppini et al.* and *Minchinton* for the reasons fully set forth above. The additional reference to *Gruenberg* does not cure the deficiencies of *Stoppini et al.* and *Minchinton* as references, and accordingly it is requested that this rejection be withdrawn.

Accordingly it is submitted that this application is now in condition for allowance and such action is respectfully requested.

The Examiner is invited to contact the undersigned attorney if there are any further issues which require discussion.

Respectfully submitted,

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